

Claims

- [c1] A memory module, comprising:
a memory array;
an ID information output circuit for outputting ID information for identifying memory modules; and
output switching means for selectively switching between output from said memory array and output from said ID information output circuit to be output,
wherein said output switching means selects output from said ID information output circuit instead of output from said memory array until the memory module is initially written after power supply to the memory module has been started.
- [c2] The memory module according to Claim 1, further comprising a switch control means for controlling said output switching means such that it selects output from said ID information output circuit from said start of power supply to initial writing, and subsequently selects output from said memory array, based on a reset detection signal that is generated when the power supply is started and a second signal corresponding to a signal indicating writing to the memory module.

- [c3] The memory module according to Claim 2, further comprising reset detection means for outputting said reset detection signal in response to said start of power supply.
- [c4] A memory module, comprising:
a memory array;
an ID information output circuit for outputting identification information for identifying memory modules;
a flip-flop that is set and reset in accordance with a reset detection signal that is generated when power supply to the memory module is started and a second signal corresponding to a signal indicating writing to the memory module; and
a selector for selectively switching between output from said memory array and output from said ID information output circuit to be output depending on output from said flip-flop.
- [c5] An information processing apparatus, comprising:
a memory module;
means for performing reading from said memory module before it is initially written after said memory module has been turned on; and
means for, if the information obtained by said reading is ID information for identifying said memory module, per-

forming initialization relating to said memory module based on the ID information.

[c6] The information processing apparatus according to Claim 5, further comprising:
means for determining if the information obtained by said reading is said ID information by examining if ID information corresponding with the information obtained by said reading exists in a predetermined table,
wherein said initialization is performed based on configuration information corresponding to the ID information in said table.

[c7] The information processing apparatus according to Claim 5, further comprising:
means for, if the information obtained by said reading is not said ID information or is an undefined value, obtaining the identification information of said memory module from output means for identification information for said memory module that is provided in a system unit of the information processing apparatus; and
means for performing initialization relating to said memory module based on said identification information.

[c8] The information processing apparatus according to Claim 5, further comprising:

means for, if the information obtained by said reading is not said ID information or is an undefined value, performing initialization of said memory module utilizing an SPD function.

[c9] An initialization method relating to a memory module in a computer, comprising:

a step of said computer performing reading from said module before said memory module is initially written after said computer has been turned on; and

a step of, if the information obtained by said reading is ID information for identifying said memory module, said computer performing initialization relating to said memory module based on the ID information.

[c10] The initialization method relating to a memory module according to Claim 9, further comprising:

a step of said computer determining whether the information obtained by said reading is said ID information by examining if ID information corresponding with the information obtained by said reading exists in a predetermined table,

wherein said initialization is performed based on configuration information corresponding to the ID information in said table.

[c11] The initialization method relating to a memory module

according to Claim 9, further comprising:
a step of, if the information obtained by said reading is not said ID information or is an undefined value, said computer obtaining the identification information of said memory module from output means for identification information for said memory module that is provided in a system unit of said computer; and
a step of said computer performing initialization relating to said memory module based on said identification information.

[c12] The initialization method relating to a memory module according to Claim 9, further comprising:
a step of, if the information obtained by said reading is not said ID information or is an undefined value, performing initialization of said memory module utilizing an SPD function.

[c13] A program for causing a computer to execute an initialization procedure of performing initialization relating to its memory module, said initialization procedure comprising the steps of:
reading from said memory module before initially writing to said memory module after power supply to said memory module has been started; and
if information obtained by said reading is ID information for identifying said memory module, performing initial-

ization relating to said memory module based on the ID information.

[c14] The program according to Claim 13, wherein said initialization procedure further comprises the step of determining if the value obtained by said reading is said ID information by examining if ID information corresponding with the information obtained by said reading exists in a predetermined table, wherein said initialization is performed based on configuration information corresponding to the ID information in said table.

[c15] The program according to Claim 13, wherein said initialization procedure further comprises:
a step of, if the information obtained by said reading is not said ID information or is an undefined value, obtaining the identification information of said module from output means for identification information for said memory module that is provided in a system unit of said computer;
and a step of performing initialization relating to said memory module based on said identification information.

[c16] The program according to Claim 13, wherein said initialization procedure further comprises a step of, if the in-

formation obtained by said reading is not said ID information or is an undefined value, performing initialization of said memory module utilizing an SPD function.